

CLAIMS

What is claimed is:

1. Said flow rate limiter (DUR) with a said flow body (DUK), wherein the said flow
5 body (DUK) is penetrated by at least one said channel (KAN), through which a
fluid can flow, with a said inlet port (EIN) and a said outlet port (AUS) and is
provided with at least one said gas channel (GKA) with a said gas intake (GAF)
and a said gas outlet port (GUF) for a gas to be mixed with the fluid emerging
from the said channel (KAN),
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characterized in that

a said inlet funnel (ELT) is connected to the said inlet port (EIN).
- 15 2. Said flow rate limiter (DUR) in accordance with claim 1, characterized in that the
curvature of the said inlet funnel (ELT) corresponds to a curve $F(x) = C \cdot 1/x$.
3. Said flow rate limiter (DUR) in accordance with claim 1 or 2, characterized in that
the at least one said channel (KAN) for the fluid and the at least one said gas
20 outlet port (GUF) open into one plane.
4. Said flow rate limiter (DUR) in accordance with one of the claims 1 through 3,
characterized in that the said at least one channel (KAN) has a circular cylindrical
design and is arranged axially in the said flow body (DUK).
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5. Said flow rate limiter (DUR) in accordance with one of the claims 1 through 4,
characterized in that a said nonreturn valve (RUC) is arranged in the said gas
channel (GKA).
- 30 6. Said flow rate limiter (DUR) in accordance with one of the claims 1 through 5,
characterized in that the said flow rate limiter (DUR) has at least one said recess
(AUN) for receiving magnetic, inorganic or organic materials.
7. Said mount (AUF) for limiting flow rate with a said inlet port (INL) and a said

outlet port (OUT) for a fluid, wherein the said inlet port (INL) has a larger cross section than the said outlet port (OUT), characterized in that a said flow rate limiter (DUR) in accordance with one of the claims 1 through 5 is arranged between the said inlet port (INL) and the said outlet port (OUT).

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8. Said mount (AUF) in accordance with claim 7, characterized in that the said gas intake (GAF) of the said flow rate limiter (DUR) is connected in the mounted state in alignment with a said gas intake channel (GAS) of the said mount (AUF).

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9. Said mount (AUF) in accordance with claim 7 or 8, characterized in that the said at least one channel (KAN) for the fluid and the said at least one gas outlet port (GUF) open into a said mixing chamber (MIS) that is permeable in the flow direction.

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10. Said mount (AUF) in accordance with claim 9, characterized in that the said mixing chamber (MIS) has a truncated cone-shaped cross section.

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11. Said mount (AUF) in accordance with claim 9, characterized in that the said mixing chamber (MIS) has said rounded shoulders (SUL), whose curvature corresponds to a curve $F(x) = C \cdot 1/x$.

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12. Said mount (AUF) in accordance with one of the claims 7 through 11, characterized in that the said flow rate limiter (DUR) has at least one said grooved section (NUT) on the said outer surface (AMA).

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13. Said mount (AUF) in accordance with one of the claims 7 through 11, characterized in that the said mount (AUF) has at least one said grooved section on the said inner surface (IMA).

14. Said mount (AUF) in accordance with one of the claims 7 through 13, characterized in that the said outer surface (OBE) of the said mount (AUF) has a smooth design.

15. Said mount (AUF) in accordance with one of the claims 7 through 14,

characterized in that at least one said means (MIT) is provided for controlling the flow rate.

- 5 16. Mount in accordance with one of the claims 7 through 15, characterized in that the said housing (GEH) has at least one said recess (AUN) in the area of the said outlet port (OUT) for receiving magnetic, inorganic or organic materials.
- 10 17. Mount in accordance with one of the claims 6 through 15, characterized in that the said housing (GEH) has at least one said recess (AUN) in the area of the said flow rate limiter (DUR) for receiving magnetic, inorganic or organic materials.
18. Use of a said flow rate limiter (DUR) in accordance with one of the claims 1 through 6 for mixing water as the fluid and air as the gas.
- 15 19. Process for mixing at least one fluid with at least one gas, characterized in that the flow rate of the at least one fluid is reduced and its flow rate is increased, and the fluid is swirled and then mixed with the at least one gas.
- 20 20. Process in accordance with claim 19, characterized in that water as fluid and air as gas are used.